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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/449,649	11/30/1999	JOSEPH J. NAJDA	NAJDA-2-8-1	6532
30594	7590	01/28/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			RYMAN, DANIEL J	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/449,649	Applicant(s) NAJDA ET AL.	
	Examiner Daniel J. Ryman	Art Unit 2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 27-43 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 27-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naohiro (USPN 6,317,414).
4. Regarding claims 27, 38, and 43, Naohiro discloses a remote terminal in an asynchronous transfer mode network (col. 3, lines 21-29), comprising: a first path (ref. 5-2: VPI1) for receiving a first cell (signal) with a first plurality of components (Fig. 1; col. 5, line 66-col. 6, line 28; and col. 6, lines 40-58) where Applicant defines "cell" to be an information component (pg. 13, lines 5-8); a second path (ref. 5-3: VPI2) for receiving a second cell (signal) with a second plurality of components (Fig. 1; col. 5, line 66-col. 6, line 28; and col. 6, lines 40-58); first multiplexers (network interface multiplexers) for routing received first and second cells (signals) to and from a user interface (col. 7, line 43-col. 8, line 7), the user interface for selecting less than all of the first plurality of components in the first signal in place of less than all of the second plurality of components in the second signal (ref. 5-8 and col. 7, line 43-col. 8, line 7) where the user

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interface package selects whichever portion of the first or the second signal is closest to normality in order to form the output signal (ref. 5-8 and col. 7, line 43-col. 8, line 7).

Naohiro does not expressly disclose in the primary embodiment that the first multiplexers are a single multiplexer. However, Naohiro does disclose that the outputs of the first multiplexers can be combined using a single multiplexer such that there is only one input to the user interface (col. 8, lines 16-22). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a single multiplexer for routing received first and second cells to and from a user interface in order to have only a single input for the user interface.

Naohiro does not expressly disclose that the user interface is an asynchronous feeder multiplexer where the asynchronous feeder multiplexer replaces less than all of the first plurality of components in the first signal with less than all of the second plurality of components in the second signal. However, Naohiro does disclose the use of multiplexing when combining or replacing signals to form a single composite signal (col. 7, lines 47-50; col. 7, line 67-col. 8, line 2; and col. 8, lines 59-65). Naohiro also discloses that the system is an asynchronous system (col. 6, lines 40-57). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the user interface comprise an asynchronous feeder multiplexer where the asynchronous feeder multiplexer replaces less than all of the first plurality of components in the first signal with less than all of the second plurality of components in the second signal in order to obtain a single signal that comprises the signal components of the two signals that have the best normality.

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5. Regarding claim 28, referring to claim 27, Naohiro discloses that the asynchronous feeder multiplexer includes protection logic adapted to compare the first cell with the second cell to select a cell to be output (ref. 5-8 and col. 7, line 43-col. 8, line 7).

6. Regarding claim 29, referring to claim 28, Naohiro discloses that the protection logic selects for the output the cell which remains after a loss of signal for at least one of the first cell and the second cell has been detected (ref. 5-8 and col. 7, line 43-col. 8, line 7).

7. Regarding claim 30, referring to claim 28, Naohiro discloses that the protection logic selects for the output the cell having a best signal quality (ref. 5-8 and col. 7, line 43-col. 8, line 7).

8. Regarding claim 31, referring to claim 28, Naohiro discloses that the cell to be output includes at least one of the first plurality of components and at least one of the second plurality of components (ref. 5-8 and col. 7, line 43-col. 8, line 7) where the user interface package selects whichever portion of the first or the second signal is closest to normality in order to form the output signal.

9. Regarding claim 32, referring to claim 31, Naohiro discloses that the selected components in the cell for output are selected based on a best signal quality of the components (ref. 5-8 and col. 7, line 43-col. 8, line 7).

10. Regarding claim 33, referring to claim 27, Naohiro discloses that the remote terminal is a portion of a network (Fig. 1 and col. 6, lines 40-58).

11. Regarding claim 34, referring to claim 33, Naohiro discloses that the network is a synchronous optical network (SONET) (col. 1, lines 10-25 and col. 2, lines 52-60).

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12. Regarding claim 35, referring to claim 34, Naohiro discloses that the network employs at least an STS-1 optical bandwidth (col. 7, lines 35-43).

13. Regarding claim 36, referring to claim 33, Naohiro suggests that the network includes metallic channels in the first path and the second path since Naohiro discloses that the inventive system overcomes the limitations of the optical ring network and since Naohiro does not specifically claim an optical network in the claims (col. 2, lines 52-60 and col. 11, line 65-col. 12, line 11).

14. Regarding claim 37, referring to claim 36, Naohiro does not explicitly disclose that the network employs DS3 bandwidth; however, Naohiro does disclose that the network employs a bandwidth (col. 7, lines 35-43). It is generally considered to be within the ordinary skill in the art to adjust, vary, select, or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on applicant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1055); In re Saether, 492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Since Naohiro discloses a bandwidth, it would have been obvious to one of ordinary skill in the art to use any bandwidth, including DS-3, absent a showing of criticality by Applicant.

15. Regarding claim 39, referring to claim 38, Naohiro does not expressly disclose outputting the first cell including replaced components on at least one of the downstream path and the upstream path. However, Naohiro does disclose outputting a cell (OAM) including replaced

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components (replace dropped cell) on at least one of the downstream path and upstream path (col. 8, lines 59-65). Naohiro also discloses transmitting cells in a ring network in a downstream path and upstream path (Fig. 1). Finally, Naohiro discloses that the invention allows for fine switching (col. 3, lines 21-24). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to output the first cell including replaced components on at least one of the downstream path and the upstream path in order to allow fine switching of components of cells in the upstream and downstream path.

16. Regarding claim 40, referring to claim 38, Naohiro discloses that the replacing is determined by a signal characteristic of the first plurality of components and the second plurality of components (ref. 5-8 and col. 7, line 43-col. 8, line 7).

17. Regarding claim 41, referring to claim 40, Naohiro discloses that the signal characteristic is a best signal quality (ref. 5-8 and col. 7, line 43-col. 8, line 7).

18. Regarding claim 42, referring to claim 40, Naohiro discloses that the signal characteristic is a remaining signal after a signal loss (ref. 5-8 and col. 7, line 43-col. 8, line 7).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 7:00-4:30 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DJR
Daniel J. Ryman
Examiner
Art Unit 2665



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